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ScienceDirect

Energy Procedia 1 (2009) 4715–4718

Energy Procedia

www.elsevier.com/locate/procedia

GHGT-9

Public information: On why and when multiple information sources are more effective than single information sources in communication about CCS.

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Abstract

The present experimental research shows that communication about CCS to the public is most likely to be effective when multiple stakeholders communicate information about CCS in collaboration instead of doing so separately. Furthermore, this research demonstrates that such collaboration between stakeholders does not harm the reputation of relevant stakeholders. Finally, the present work shows that that perceived dissimilarity of collaborating stakeholders—that is, the perception that the stakeholders involved have different goals and interests concerning CCS— is a crucial precondition for collaborating stakeholders being more effective than single stakeholders. The results are discussed for their practical implications.

Keywords: CCS; Public information; non-persuasive communication; information sources; stakeholders; collaboration

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doi:10.1016/j.egypro.2009.02.295

1. Introduction

For the successful implementation of novel climate change mitigation technologies such as carbon capture and storage (CCS) public acceptance can be expected to be important. Currently, the development of CCS in the Netherlands is transcending from a (laboratory) research phase to a stage in which CCS is tested in the field. Hence, in the near future members of the Dutch general public—and in particular those citizens living near possible demonstration sites—will need to be informed about the technology. Importantly, when we speak of the provision of information to the public (i.e., public information), in a CCS context this entails the provision of factual, non-persuasive information. This type of communication lets the facts speak for themselves and recognizes that people may reach different conclusions on the basis of the information provided [1]. The present analysis does not pertain to persuasive messages intended to increase public acceptance of CCS. In fact, the deployment of such messages can be expected to backfire, because people tend to show reactance to messages they suspect to be of persuasive intent [2, 3].

Regarding the provision of information about CCS to the public, it is important that citizens evaluate CCS communications to be valuable and of high quality, in order for them to feel able to form accurate impressions of CCS. Dissatisfaction with the public information provided would be highly undesirable, because it could result in resentment of CCS for reasons unrelated to the characteristics of the technology. However, the difficulty with communication about CCS is that people lack the necessary background knowledge to evaluate information about the technology on its merits [4]. This raises the important question of how citizens in this case will decide whether information about CCS is valuable.

Previous research in social psychology and communication suggests that citizens' evaluations of public information may depend on characteristics of the source that provides information about CCS. In a CCS context, many potential sources (stakeholders) are available, for example the government, industrial organizations and environmental NGOs. Each stakeholder has different goals and opinions about CCS. Therefore, it is likely that each stakeholder will be inclined to provide information about CCS separately. The present examines by means of two experiments whether public information would be more effective (i.e., perceived to be of greater value) when multiple stakeholders communicate information about CCS in collaboration instead of doing so separately. To date, this question has not been addressed in the communication literature. Furthermore, the present research addresses whether such collaboration between stakeholders would harm or benefit stakeholder reputations.

2. Method

The paradigm of the two experiments was comparable. On arrival at the laboratory participants—undergraduate students from Leiden University—were seated in a cubicle containing a computer. After having provided informed consent, via the computer participants read a brief introduction about large-scale implementation of a novel technology of carbon dioxide capture and storage (CCS) in the Netherlands. In this introduction we told them that the Dutch government was considering large-scale implementation of CCS in the Netherlands. Next, we informed participants that they would be given an opportunity to read a report that contained additional information about CCS. Depending on their experimental condition, participants in Study 1 learned that the report (i.e., the information provided) had been written by an individual oil company, an individual environmental NGO, or by an oil company and an environmental NGO together. Depending on their experimental condition participants in Study 2 learned that the report had been written by an individual oil company, by two oil companies or by an oil company and an NGO together. After answering questions concerning their expectations about the information in the report participants in Studies 1 and 2 read the report. The report was identical in all experimental conditions. Moreover, the information in the report was factual and non-persuasive. After reading the report, participants answered questions concerning their evaluations of the information in the report and their credibility perceptions of each stakeholder.

3. Results

In Study 1 we predicted and found that participants expected and perceived the information about CCS to be of higher quality with an environmental NGO and an oil company providing the information together than when either

of these organizations provided the information. Moreover, we found this effect was due to a stronger expectation that information would be balanced (i.e., approaching CCS from different perspectives) in the collaboration condition compared to both single-stakeholder conditions. In addition, this study revealed that the collaboration between the environmental NGO and the oil company did not affect perceptions of these organizations in a positive or negative way. In Study 2 we replicated and extended the findings of Study 1. Importantly, the results of this study indicate that perceived dissimilarity of collaborating stakeholders—that is, the perception that the stakeholders involved have different goals and interests concerning CCS— is a crucial precondition for collaborating stakeholders being more effective than individual stakeholders.

4. Conclusion

The results of these two studies experiments also have important practical implications for designers of information campaigns about CCSs. Our results indicate that the best practice in informing people about CCS would be to have different CCS stakeholders provide information about the technology in collaboration. When different stakeholders collaborate, citizens will perceive this combined information to be of upmost quality, because they expect such combined communications to represent different perspectives and positions on CCS. As the present research has shown, collaborative communications are only evaluated more positively than individual communications to the extent that collaborating stakeholders are perceived to represent different perspectives, however. So, the best practice in informing citizens living near a CCS demonstration site may be to have dissimilar stakeholders prove information in collaboration, for example a local environmental NGO in combination with an oil company. Combined information provision by two similar stakeholders like two energy companies or two governmental bodies, on the other hand, is unlikely to work. Previous work in the context of CCS on information-choice questionnaires [4] has already shown that it is feasible for different CCS stakeholders to reach agreement on factual information about the technology. In addition, the present thesis shows that stakeholders that are highly trusted by the general public do not need to fear that collaboration with less-trusted stakeholders will harm their reputations. In sum, the present thesis suggests that collaborative communications are likely to be highly effective, and are harmless for the perceptions people hold of individual stakeholders. In addition to this, research by De Best-Waldhober et al. [4] suggests shown that collaborative communications are feasible.

5. References

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6. Acknowledgements

This research is part of CATO, the Dutch national research program on CO2 Capture and Storage. CATO is financially supported by the Dutch Ministry of Economic Affairs under the BSIK program. More information can be found on www.co2-cato.nl. A more detailed report of the research discussed in the present paper can be obtained by contacting the first author.